

The claims defining the invention are as follows:

- 1 A thermoplastic can comprising a thermoplastic body having a disc like top moulded as one with a tubular element defining the sides of the body and extending downwardly from the peripheral portions of the top; means associated with the top to facilitate opening by an end user; a thermoplastic base member having an externally directed protrusion adapted to engage a relatively thin walled recess in the radially internally facing lower peripheral portion of the body thereby effecting a permanent seal at the base of the container after filling thereof; the resistance to permanent inward deformation of the externally directed protrusion exceeding the resistance to permanent outward deformation of the thinwalled recess; the wall thickness of the lower peripheral portion of the body below the thin walled recess exceeding that of the thin walled recess.
- 2 A thermoplastic can in accordance with claim 1 hereof wherein the externally directed protrusion extends externally and downwardly and is therefore capable of flexing inwardly whilst being introduced into the body of the can prior to coming to rest in the thinwalled recess.
- 3 A thermoplastic can in accordance with claim 1 hereof wherein the externally directed protrusion extends externally and downwardly and is therefore capable of flexing inwardly whilst being introduced into the body of the can prior to coming to rest in the thinwalled recess.; the radially innermost side of the protrusion defining with the adjacent surface of the

base an undercut; the included angle of the undercut being between 20 and 45 degrees.

- 4 A thermoplastic can in accordance with claim 1 hereof wherein the resistance to permanent inward deformation of the externally directed protrusion exceeds the resistance to permanent outward deformation of the thin walled recess due to the fact that the radially externally directed protrusion is fabricated from thicker thermoplastic material than that present in the thin walled recess.
- 5 A thermoplastic can in accordance with claim 1 hereof wherein the base-body interface is provided with a secondary seal apart from that effected by the externally directed protrusion nesting in the thin walled recess; this secondary seal being effected by one or more resiliently deformable annular protrusions from the base contacting the body and deforming thereagainst so as to form a seal when the externally directed protrusion nests in the thin walled recess so as to form the primary seal.
- 6 A thermoplastic can in accordance with claim 1 hereof wherein the base-body interface is provided with a secondary seal apart from that effected by the externally directed protrusion nesting in the thin walled recess; this secondary seal being effected by one or more resiliently deformable annular protrusions from the body contacting the base and deforming

thereagainst so as to form a seal when the externally directed protrusion nests in the thin walled recess so as to form the primary seal.

- 7 A thermoplastic can in accordance with claim 1 hereof wherein the tubular body or the base or both are fabricated from a Polyolefin such as PET or PEN.
- 8 A thermoplastic can in accordance with claim 1 hereof wherein the interference between the radially outermost extremity of the protrusion and the recess in the thinwalled section of the body is in the range of 0.1 mm to 0.7 mm.
- 9 A thermoplastic can in accordance with claim 1 hereof wherein the interference between the lowermost surface of the protrusion and that complementary surface of the recess in the can body against which it is intended to seal is between 0.03 mm and 0.08 mm.
- 10 A thermoplastic can in accordance with claim 1 hereof wherein the radially outermost extremity of the protrusion has a relatively sharp edge exhibiting a radius of between zero and 2.5 mm.
- 11 A thermoplastic can in accordance with claim 1 hereof wherein the wall thickness of the lower peripheral portion of the body below the thin walled recess exceeds the minimum wall thickness of the thin walled recess by at least 20 per cent .